

REMARKS

Reconsideration and the timely allowance of the pending claims, in view of the following remarks, are respectfully requested.

In the pending Office Action, the Examiner rejected claims 18, 19, and 21-24, under 35 U.S.C. §103(a), as allegedly being unpatentable over Uchida '051 (U.S. Patent No. 6,057,051); rejected claims 18, 19, and 21-24, under 35 U.S.C. §103(a), as allegedly being unpatentable over Uchida '051 in view of Redmond '087 (U.S. Pub. No. 2004/0023087); and rejected claims 18, 19, and 21-24, under 35 U.S.C. §103(a), as allegedly being unpatentable over Uchida '051 in view of Faris '168 (U.S. Pub. No. 2004/0022168).

By this Amendment, claim 18 has been amended to provide a clearer presentation of the claimed subject matter. No new matter has been introduced. As such, claims 18-19 and 21-24 are currently presented for examination, of which claim 18 is the sole independent claim.

Applicant traverses the art rejections under §103(a) for the following reasons:

I. Rejections Under §103(a).

Applicants respectfully point out that independent claim 18 is directed to an "electronic apparatus." So, unlike a wrench or hammer, the electronic apparatus contains a controller and other elements that impart certain operational and processing functionality – and such functionality, when claimed, act as limitations that must be given patentable weight.

Specifically, MPEP 2106.VI provides that, for computer and processor-related inventions, if the difference between the prior art and the claimed invention is limited to descriptive material stored on or employed by a machine, Office personnel must determine whether the descriptive material is functional descriptive material or nonfunctional descriptive material. Functional descriptive material is a limitation in the claim and must be considered and addressed in assessing patentability under 35 U.S.C. 103. Thus, a rejection of the claim as a whole under 35 U.S.C. 103

is inappropriate unless the functional descriptive material would have been suggested by the prior art. *In re Dembiczak*, 175 F.3d 994, 1000, 50 USPQ2d 1614, 1618 (Fed. Cir. 1999). Nonfunctional descriptive material cannot render nonobvious an invention that would have otherwise been obvious. *In re Ngai*, 367 F.3d 1336, 1339, 70 USPQ2d 1862, 1864 (Fed. Cir. 2004) (combining printed instructions and an old product into a kit will not render the claimed invention nonobvious even if the instructions detail a new use for the product). Cf. *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983) (when descriptive material is not functionally related to the substrate, the descriptive material will not distinguish the invention from the prior art in terms of patentability).

Equally notable, prevailing case law makes it clear that "[f]unctional language in an apparatus claim requires an accused apparatus to possess the capability of performing the recited function. It does not convert such claim into a method of use or hybrid claim. *R.A.C.C. Industries Inc. v. Stun-Tech Inc.*, 49 USPQ2d 1793, 1796 (Fed. Cir. 1998-unpublished).

With this said, Applicants submit that independent claim 18 positively recites, *inter alia, a fuel cell unit* that includes a sensing unit configured to sense a remaining amount of fuel in the tank, and to sense whether the tank is installed in the installation portion, *a first storage unit, which is accessible by the body, configured to store information indicating the remaining amount of fuel sensed by the sensing unit, and to store information indicating a result sensed by the sensing unit, and an informing unit configured to inform the body of the updating of the information stored in the first storage unit.*

Claim 18 also positively recites a *body* that includes a *controller which includes a second storage unit and directly reads, when the body is informed of the updating of the information stored in the first storage unit, the information indicating the remaining amount of fuel sensed by the sensing unit from the first storage unit and the information indicating whether the tank is installed in the installation portion sensed by the sensing unit and stores the read information in the second storage unit.*

These features are amply supported by the embodiments disclosed throughout the written description. By way of example, the disclosed embodiments provide that the electronic apparatus includes a fuel cell unit that has a built-in memory which can be accessed from the body. The memory stores status information such as the remaining amount of fuel in the tank and whether or not the fuel tank is installed, and informs, when the status information in the memory is updated, the body of the updating. The body accesses the memory of the fuel cell unit upon receipt of the information, and acquires the updated status information to be in touch with the latest status of the fuel cell unit.

That is, the electronic apparatus enables timely transmitting various states of the fuel cell unit to the body, merely by providing the fuel cell unit with a simple communication function to inform the body that the status information is updated, as opposed to the complex communication function of informing the body of various states. In this manner, the present invention provides a low-cost fuel cell unit.

Applicants submit that none of the asserted references, whether taken alone or in combination, teach or suggest **each and every element** of claim 18, including the features identified above. That is, there is absolutely nothing in Uchida '051, Redmond '087, or Faris '168 that remotely suggest the structure of storing status information in a built-in memory and that can be accessed from the body and informs the body of updating of the status information (instead of various states) to prompt access to the memory, such that the status information can be referred to by the body, as a configuration of conveying various states of a peripheral equipment to the body. In other words, none of the references suggest **a fuel cell unit** that includes a sensing unit configured to sense a remaining amount of fuel in the tank, and to sense whether the tank is installed in the installation portion, **a first storage unit, which is accessible by the body, configured to store information indicating the remaining amount of fuel sensed by the sensing unit, and to store information indicating a result sensed by the sensing unit, and an informing unit configured to inform the body of the updating of the information stored in the first storage unit**, as required by claim 18.

Nor is there anything in the references that suggest a **body** that includes a **controller which includes a second storage unit and directly reads, when the body is informed of the updating of the information stored in the first storage unit, the information indicating the remaining amount of fuel sensed by the sensing unit from the first storage unit and the information indicating whether the tank is installed in the installation portion sensed by the sensing unit and stores the read information in the second storage unit**, as also required by claim 18.

Thus, for at least these reasons, Applicants submit that Uchida '051, Redmond '087, or Faris '168 are incapable of rendering claim 18 unpatentable. As such, claim 18 is clearly patentable. In addition, because claims 19 and 21-24 depend from claim 18, claims 19 and 21-24 are patentable at least by virtue of dependency as well as for their additional recitations. Accordingly, the immediate withdrawal of the §103(a) rejections of claims 18-19 and 21-24 is respectfully requested.

II. Conclusion.

All matters having been addressed and in view of the foregoing, Applicants respectfully request the entry of this Amendment, the Examiner's reconsideration of this application, and the immediate allowance of all pending claims.

Applicants' Representative remains ready to assist the Examiner in any way to facilitate and expedite the prosecution of this matter. If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the Undersigned at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number **03-3975**.

The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully Submitted,

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